B2 that is

- 39. (Amended) An isolated protein comprising a first amino acid sequence that is 90% or more identical to a second amino acid sequence selected from the group consisting of:
 - (a) the amino acid sequence of amino acid residues 1 to 285 of SEQ

sub 7

ID NO:2; and

(b) the amino acid sequence of amino acid residues 73 to 285 of SEQ

ID NO:2;

survival.

wherein said protein modulates leukocyte proliferation, differentiation or

R3

- 57. (Amended) An isolated protein comprising an amino acid sequence selected from the group consisting of:
- (a) the amino acid sequence of amino acid residues n to 285 of SEQ ID NO:2, where n is an integer in the range of 2-190;
- (b) the amino acid sequence of amino acid residues 1 to m of SEQ ID NO:2, where m is an integer in the range of 274-284; and
- (c) the amino acid sequence of amino acid residues n to m of SEQ ID NO:2, where n is an integer in the range of 2-100 and m is an integer in the range of 274-284;

wherein said protein modulates leukocyte proliferation, differentiation or survival.

SUB 7

78. An isolated protein comprising a first amino acid sequence (Amended) BY that is 95% or more identical to a second amino acid sequence selected from the group consisting of: (a) the amino acid sequence of amino acid residues n to 285 of SEO ID NO:2, where n is an integer in the range of 2-190; (b) the amino acid sequence of amino acid residues 1 to m of SEQ ID NO:2, where m is an integer in the range of 274-284; and (c) the amino acid sequence of amino acid residues n to m of SEQ ID NO:2, where n is an integer in the range of \(\frac{1}{2} \)-190 and m is an integer in the range of \(\frac{2}{4} \)-284; and wherein said protein modulates leukocyte proliferation, differentiation or survival. (Amended) An isolated protein comprising the amino acid sequence of amino acid residues 191-285 of SEQ ID NO:2, wherein said protein modulates leukocyte proliferation, differentiation or survival. 160. Ah isolated protein consisting of an amino acid sequence (Amended) that is 90% or more identical to the amino acid sequence of amino acid residues 134-285 of SEQ ID NO:2, wherein said protein modulates leukocyte proliferation, differentiation or survival. 178. (Amended) An isolated protein comprising an amino acid sequence that is 90% or more identical to the amino acid sequence of amino acid residues 134-285 of

survival.

196. (Amended) An isolated protein comprising a fragment of the polypeptide of SEQ ID NO:2, wherein said fragment modulates leukocyte proliferation, differentiation or survival.

SEQ ID NO:2, wherein said protein modulates leukocyte proliferation, differentiation or

B9 Sulgo 7 213. (Amended) An isolated protein comprising an amino acid sequence of at least 30 contiguous amino acid residues of SEQ ID NO:2 wherein said protein modulates leukocyte proliferation, differentiation or survival.

225. (Amended) The protein of claim 213 wherein the heterologous amino acid sequence is the amino acid sequence of an immunoglobulin Fc domain.

- NO:2 fused to a heterologous amino acid sequence, wherein said fragment comprises an amino acid sequence selected from the group consisting of:
 - (a) the amino acid sequence of amino acid residues 115 to 147 of SEQ

ID NO:2;

(b) the amino acid sequence of amino acid residues 150 to 163 of SEQ

ID NO:2;

(c) the amino acid sequence of amino acid residues 171 to 194 of SEQ

ID NO:2;

(d) the amino acid sequence of amino acid residues 223 to 247 of SEQ

ID NO:2; and

- (e) the amino acid sequence of amino acid residues 271 to 278 of SEQ ID NO:2.
- 233. (Amended) The protein of claim 232 wherein said fragment comprises amino acid sequence (a).
- 234. (Amended) The protein of claim 232 wherein said fragment comprises amino acid sequence (b).
- 235. (Amended) The protein of claim 232 wherein said fragment comprises amino acid sequence (c).
- 236. (Amended) The protein of claim 235 wherein said fragment also comprises amino acid sequence (d).

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237. (Amended) amino acid sequence (d).

The protein of claim 232 wherein said fragment comprises

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238. (Amended) amino acid sequence (e).

The protein of claim 232 wherein said fragment comprises

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240. (Amended) The protein of Claim 232 wherein the heterologous amino acid sequence is the amino acid sequence of an immunoglobulin Fc domain.

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- 247. (Amended) An isolated protein comprising an amino acid sequence selected from the group consisting of:
- (a) the amino acid sequence of an amino-terminal deletion protein mutant of the full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768, wherein said amino-terminal deletion protein mutant excludes up to 190 amino acid residues from the amino terminus of said full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768;
- (b) the amino acid sequence of a carboxy-terminal deletion protein mutant of the full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768, wherein said carboxy-terminal deletion protein mutant excludes up to 11 amino acid residues from the carboxy terminals of said full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768; and
- (c) the amino acid sequence of an amino- and carboxy-terminal deletion protein mutant of the full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768, wherein said amino and carboxy-terminal deletion protein mutant excludes up to 190 amino acid residues from the amino terminus and up to 11 amino acid residues from the carboxy terminus of said said full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768;

wherein said protein modulates leukocyte poliferation, differentiation or survival.

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- 268. (Amended) An isolated protein comprising a first amino acid sequence that is 95% or more identical to a second amino acid sequence selected from the group consisting of:
- (a) the amino acid sequence of an amino-terminal deletion protein mutant of the full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768, wherein said amino-terminal deletion protein mutant excludes up to 190 amino acid residues from the amino terminus of said full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768;

5 wh D35

- (b) the amino acid sequence of a carboxy-terminal deletion protein mutant of the full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768, wherein said carboxy-terminal deletion protein mutant excludes up to 11 amino acid residues from the carboxy terminus of said full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768; and
- (c) the amino acid sequence of an amino- and carboxy-terminal deletion protein mutant of the full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768, wherein said amino- and carboxy-terminal deletion protein mutant excludes up to 190 amino acid residues from the amino terminus and up to 11 amino acid residues from the carboxy terminus of said said full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768;

wherein said protein modulates leukocyte proliferation, differentiation or

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survival.

155 273. (Amended) The protein of claim 269 which excludes 71 amino acid residues from the amino terminus of the full length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768.

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290. (Amended) An isolated protein comprising a first amino acid sequence that is 95% or more identical to a second amino acid sequence consisting of the amino acid sequence of an amino-terminal deletion protein mutant of the full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768, wherein said aminoterminal deletion protein mutant excludes up to 133 amino acid residues from the amino terminus of said full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768, and wherein said protein modulates leukocyte proliferation, differentiation or survival.

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307. (Amended) An isolated protein consisting of a first amino acid sequence that is 95% or more identical to a second amino acid sequence consisting of the amino acid sequence of an amino-terminal deletion protein mutant of the full-length protein encoded by the cDNA clone contained in ATCC Deposit Number 97768, wherein said aminoterminal deletion protein mutant excludes up to 133 amino acid residues from the amino terminus of said full-length protein encoded\by the cDNA clone contained in ATCC Deposit Number 97768, and wherein said protein modulates leukocyte proliferation,

BIG

differentiation or survival.

324. An isolated protein comprising a fragment of the (Ameded) polypeptide encoded by the cDNA clone contained in ATCC Deposit Number 97768, wherein said fragment modulates leukocyte proliferation, differentiation or survival.

341. (Amended) An isolated protein comprising an amino acid sequence of at least 30 contiguous amino acid residues of the polypeptide encoded by the cDNA clone contained in ATCC Deposit Number 97768 wherein said protein modulates leukocyte proliferation, differentiation or survival.

- 360. (New) The protein of claim 39 wherein the protein modulates leukocyte proliferation.
 - 361. (New) The protein of claim 360 wherein the leukocyte is a lymphocyte.
- 362. (New) The protein of claim 39 wherein the protein stimulates leukocyte proliferation.
 - 363. (New) The protein of claim 362 wherein the leukocyte is a lymphocyte.
 - 364. (New) The protein of claim 39 wherein the protein modulates leukocyte differentiation.
 - 365. (New) The protein of claim 364 wherein the leukocyte is a lymphocyte.
- 366. (New) The protein of claim 39 wherein the protein stimulates leukocyte differentiation.
 - 367. (New) The protein of claim 366 wherein the leukocyte is a lymphocyte.
 - 368. (New) The protein of claim 39 wherein the protein modulates leukocyte survival.
 - 369. (New) The protein of claim 368 wherein the leukocyte is a lymphocyte.
- sub 370. (New) The protein of claim 39 wherein the protein stimulates leukocyte survival.
 - 371. (New) The protein of claim 370 wherein the leukocyte is a lymphocyte.
 - 372. (New) The protein of claim 57 wherein the protein modulates leukocyte survival.

(New) The protein of claim 372 wherein the leukocyte is a lymphocyte. (New) The protein of claim 57 wherein the protein stimulates leukocyte survival. (New) The protein of claim 374 wherein the leukocyte is a lymphocyte. 375. (New) The protein of claim 78 wherein the protein modulates leukocyte survival. 377. (New) The protein of claim 376wherein the leukocyte is a lymphocyte. (New) The protein of claim 78 wherein the protein stimulates leukocyte survival. (New) The protein of claim 378 wherein the leukocyte is a lymphocyte. 379. (New) The protein of claim 103 wherein the protein modulates leukocyte 380. survival. 381. (New) The protein of claim 380 wherein the leukocyte is a lymphocyte. 382. (New) The protein of claim 10/3 wherein the protein stimulates leukocyte survival. (New) The protein of claim \$82 wherein the leukocyte is a lymphocyte. 383. (New) The protein of claim 160 wherein the protein modulates leukocyte 384. survival. (New) The protein of claim 38 wherein the leukocyte is a lymphocyte. 385. (New) The protein of claim 160 wherein the protein stimulates leukocyte 386. survival.

- 387. (New) The protein of claim \$86 wherein the leukocyte is a lymphocyte.
- 388. (New) The protein of claim 178 wherein the protein modulates leukocyte survival.
 - 389. (New) The protein of claim 388 wherein the leukocyte is a lymphocyte.

505 390. (New) The protein of claim 78 wherein the protein stimulates leukocyte survival.

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- 391. (New) The protein of claim 390 wherein the leukocyte is a lymphocyte.
- 392. (New) The protein of claim 196 wherein the protein modulates leukocyte survival.
 - 393. (New) The protein of claim \$92 wherein the leukocyte is a lymphocyte.
- 394. (New) The protein of claim 196 wherein the protein stimulates leukocyte survival.
 - 395. (New) The protein of claim 394 wherein the leukocyte is a lymphocyte.
- 396. (New) The protein of claim 213 wherein the protein modulates leukocyte survival.
 - 397. (New) The protein of claim 396 wherein the leukocyte is a lymphocyte.
- 398. (New) The protein of claim 213 wherein the protein stimulates leukocyte survival.
 - 399. (New) The protein of claim 398 wherein the leukocyte is a lymphocyte.
- 400. (New) The protein of claim 247 wherein the protein modulates leukocyte survival.

- 401. (New) The protein of claim 400 wherein the leukocyte is a lymphocyte.
- 402. (New) The protein of claim 247 wherein the protein stimulates leukocyte survival.
 - 403. (New) The protein of claim 402 wherein the leukocyte is a lymphocyte.
- (New) The protein of claim 268 wherein the protein modulates leukocyte survival.
 - 405. (New) The protein of claim 404 wherein the leukocyte is a lymphocyte.
- 406. (New) The protein of claim 268 wherein the protein stimulates leukocyte survival.
 - 407. (New) The protein of claim 406 wherein the leukocyte is a lymphocyte.
 - 408. (New) The protein of claim 290 wherein the protein modulates leukocyte survival.
 - 409. (New) The protein of claim 408 wherein the leukocyte is a lymphocyte.
- 410. (New) The protein of claim 290 wherein the protein stimulates leukocyte survival.
 - 411. (New) The protein of claim 410 wherein the leukocyte is a lymphocyte.
 - 412. (New) The protein of claim 307 wherein the protein modulates leukocyte survival.
 - 413. (New) The protein of claim 412 wherein the leukocyte is a lymphocyte.
 - 414. (New) The protein of claim 307 wherein the protein stimulates leukocyte survival.

- (New) The protein of claim 414 wherein the leukocyte is a lymphocyte. 415.
- (New) The protein of claim 324 wherein the protein modulates leukocyte 416. survival.
 - 417. (New) The protein of claim 416 wherein the leukocyte is a lymphocyte.
- (New) The protein of claim 324 wherein the protein stimulates leukocyte 418. survival.
 - (New) The protein of claim 418 wherein the leukocyte is a lymphocyte. 419.
- (New) The protein of claim 341 wherein the protein modulates leukocyte 420. survival.
 - 421. (New) The protein of claim 420 wherein the leukocyte is a lymphocyte.
- (New) The protein of claim 341 wherein the protein stimulates leukocyte 422. survival.
 - (New) The protein of claim 422 where in the leukocyte is a lymphocyte. 423.
 - 218 424. (New) A Neutrokine-alpha multimer comprising the protein of claim 12/4.
 - (New) A Neutrokine-alpha multimer comprising the protein of claim 142.
 - (New) A Neutrokine-alpha multimer comprising the protein of claim 160.
 - (New) A Neutrokine-alpha multimer comprising the protein of claim 17/8.
 - (New) A Neutrokine-alpha multimer comprising the protein of claim 290.
 - (New) A Neutrokine-alpha multimer comprising the protein of claim 307.